Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method ~~(**800**)~~ for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network, the enhancement layer transmission including at least one re-synchronisation marker followed by a Video Packet Header and header extensions, the method comprising the steps of:

replicating a reference VOPs' identifier from a video object plane header into a number of enhancement layer header extensions ~~(**715**)~~;

recovering ~~(**830, 840, 850, 860**)~~ from an error corrupting said reference VOPs' identifier by decoding a correct reference VOPs' identifier from subsequent enhancement layer header extensions and estimating a reference VOPs' identifier when an error has occurred in the reference VOPs' identifier; and

identifying ~~(**870, 880**)~~ correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission;

wherein the scalable video object plane enhancement layer transmission is based on an MPEG-4 scalable video object plane enhancement layer transmission, and the reference VOP's identifier is a 'ref_select_code' field ~~(**715**)~~.

2. (Currently Amended) The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to claim 1, wherein the step of recovering further includes the steps of:

~~estimating (**830**) a reference VOPs' identifier when an error has occurred in the reference VOPs' identifier~~;

decoding ~~(**840**)~~ the video object plane enhancement layer transmission until a video object plane enhancement layer header extensions is decoded; and

correcting ~~(**850**)~~ said estimated reference VOPs' identifier in response to a reference VOPs' identifier extracted from said decoded header extensions.

3. (Currently Amended) ~~The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to claim 1, wherein the step of recovering includes the steps of~~ A method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network, the enhancement layer transmission including at least one re-synchronisation marker followed by a Video Packet Header and header extensions, the method comprising the steps of:

replicating a reference VOPs' identifier from a video object plane header into a number of enhancement layer header extensions;

recovering from an error corrupting said reference VOPs' identifier by decoding a correct reference VOPs' identifier from subsequent enhancement layer header extensions and buffering video object plane enhancement layer transmission bits, until a video object plane enhancement layer header extensions is decoded, when an error has occurred in the reference VOPs' identifier; and

identifying correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission;

wherein the scalable video object plane enhancement layer transmission is based on an MPEG-4 scalable video object plane enhancement layer transmission, and the reference VOP's identifier is a 'ref_select_code' field

~~correcting **(870)** said reference VOP's identifier in response to a reference VOPs' identifier extracted from said decoded header extensions~~.

4. (Currently Amended) The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to claim 1, further comprising the step of:

selecting ~~**(870, 880)**~~ a correct reference VOP's identifier to decode subsequent enhancement layer transmissions.

5. (Currently Amended) A video communication system ~~(600)~~ comprising:

a video encoder ~~(615)~~ comprising:

a processor for encoding a scalable video sequence having a plurality of enhancement layers, wherein the enhancement layer transmission includes at least one re-synchronisation marker followed by Video Packet Header and header extensions;

replicating means for replicating a reference VOP's identifier from a video object plane header into a number of enhancement layer header extensions ~~(715)~~; and

a transmitter for transmitting said scalable video sequence containing said one or more reference VOPs' identifier; and

a video decoder ~~(625)~~ comprising:

a receiver for receiving said scalable video sequence containing said video object plane enhancement layer header extensions ~~(715)~~ from said video encoder;

a detector detecting one or more errors in said reference VOP's identifier in an enhancement layer of said received scalable video sequence; and

a processor operably coupled to said detector for recovering ~~(830, 840, 850, 860)~~ from an error corrupting said reference VOPs' identifier by decoding a correct reference VOP's identifier from subsequent enhancement layer header extensions when said one or more errors is detected, estimating a reference VOPs' identifier when an error has occurred in the reference VOPs' identifier, and identifying ~~(870, 880)~~ correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission;

wherein the scalable video object plane enhancement layer transmission is based on an MPEG-4 scalable video object plane enhancement layer transmission, and the reference VOPs' identifier is a 'ref_select_code' field ~~(715)~~.

6. (Currently Amended) A video communication unit ~~(615, 625)~~ adapted for use in the method of claim 1.

7. (Currently Amended) A video encoder ~~(615)~~ adapted for use in the method of claim 1.

8. (Currently Amended) A video decoder ~~(625)~~ adapted for use in the method of claim 1.

9. (Previously Presented) A mobile radio device comprising a video communication unit in accordance with claim 6.

10. (Original) A mobile radio device according to claim 9, wherein the mobile radio device is a mobile phone, a portable or mobile PMR radio, a personal digital assistant, a lap-top computer or a wirelessly networked PC.

11. (Previously Presented) A video communication unit adapted for use in the communication system of claim 5.

12. (Previously Presented) A video encoder adapted for use in the communication system of claim 5.

13. (Previously Presented) A video decoder adapted for use in the communication system of claim 5.

14. (Previously Presented) A mobile radio device comprising a video encoder in accordance with claim 7.

15. (Previously Presented) A mobile radio device comprising a video decoder in accordance with claim 8.

16. (New) The method for improving a quality of a scalable video object plane enhancement layer transmission over an error-prone network according to claim 3, wherein the step of recovering includes the steps of:

correcting said reference VOP's identifier in response to a reference VOPs' identifier extracted from said decoded header extensions.

17. (New) A video communication system comprising:

a video encoder comprising:

a processor for encoding a scalable video sequence having a plurality of enhancement layers, wherein the enhancement layer transmission includes at least one re-synchronisation marker followed by Video Packet Header and header extensions;

replicating means for replicating a reference VOP's identifier from a video object plane header into a number of enhancement layer header extensions; and

a transmitter for transmitting said scalable video sequence containing said one or more reference VOPs' identifier; and

a video decoder comprising:

a receiver for receiving said scalable video sequence containing said video object plane enhancement layer header extensions from said video encoder;

a detector detecting one or more errors in said reference VOP's identifier in an enhancement layer of said received scalable video sequence; and

a processor operably coupled to said detector for recovering from an error corrupting said reference VOPs' identifier by decoding a correct reference VOP's identifier from subsequent enhancement layer header extensions when said one or more errors is detected, buffering video object plane enhancement layer transmission bits, until a video object plane enhancement layer header extensions is decoded, when an error has occurred in the reference VOPs' identifier, and identifying correct reference video object planes to be used in a reconstruction of an enhancement layer video object plane in the scalable video transmission,

wherein the scalable video object plane enhancement layer transmission is based on an MPEG-4 scalable video object plane enhancement layer transmission, and the reference VOPs' identifier is a 'ref_select_code' field.